## **Lawrence Livermore National Laboratory**

## **Environmental Protection Department**

April 22, 2005

Re: LLNL Disclosure Letter

Dear Soon-to-be Neighbor:

Good to see that you want to know more about LLNL environmental information before you buy property near the Laboratory. Congratulations on taking the time to check everything out!

The purpose of this letter is to meet State of California disclosure requirements and to provide information to help you learn more about the environmental relationship between Lawrence Livermore National Laboratory and the local community.

The best source for a broad view of LLNL's environmental impact on the community is our environmental information web site <a href="http://www-envirinfo.llnl.gov/">http://www-envirinfo.llnl.gov/</a>. The best place to start at that website is with the latest Environmental Community Letter. The letter summarizes the most recent Site Annual Environmental Report, which contains environmental monitoring and analysis information reported to regulatory agencies in the past year, plus our own scientific studies.

The more recent complete Site Annual Environmental Reports are also available on the web site as is the Site Wide Environmental Impact Study. This study is the most detailed look ahead at potential environmental impacts from Laboratory operations and it is conducted about every ten years by the U.S. Department of Energy.

The primary concern of most potential neighbors is with off-site groundwater contamination. This is LLNL's only off-site environmental impact as determined by U.S., State and local regulatory agencies whose regulations and requirements must be met by the Laboratory.

Here's the background. Ground water and soil on the LLNL Livermore Site first became contaminated in the 1940s when the site was a U.S. Navy air-training base. Solvents and degreasers used to wash aircraft engines and parts are the primary contaminants. These contaminants are commonly referred to as volatile organic compounds or VOCs. Localized spills and leaking tanks, surface impoundments and landfills contributed to subsequent site soil and groundwater contamination after the U.S. Department of Energy (DOE) became the owner of the site. The University of California operates LLNL for DOE and manages the ground water remediation activities.

There is no public exposure to the contaminants in the ground water. The contaminated groundwater is deep underground so no one can get to it. No wells pump contaminated water for human or animal consumption so it remains underground.

Ground water carrying contaminants slowly leaves the LLNL Livermore site under Vasco Road north of East Avenue at a depth of about 70 feet. That water is being pumped back on site and treated so the contamination is removed. This reduces both the length of the contaminant plume and the strength of the contaminants in it. The treatment facility is just north of East Avenue on the east side of Vasco. A large sign on the facility shows the progress that is being made in restoring the environment.

There has been a significant reduction in contaminant strength and plume reach off-site over the past few years due to LLNL pumping. At this point the plume reaches just to the west of Vasco Road near East Avenue. The treated water is put back into the ground in a different location as a conservation measure.

Homes in the Livermore neighborhoods near the Laboratory are connected to the City of Livermore water supply system. The City has municipal wells located about three miles away from the contaminated ground water. The proximity of the city wells led to LLNL being listed on the National Priority List for "Superfund" cleanup.

The cleanup is being conducted under the oversight of the U. S. Environmental Protection Agency, California Department of Toxic Substances Control and the Bay Area Regional Water Quality Control Board. All costs are being paid by the U.S. Department of Energy.

The Laboratory has discontinued all practices known or suspected to have contributed to the release of solvents into the soil and ground water. In addition, it is now a facility-wide priority to reduce or eliminate the use of hazardous materials whenever possible. There is also extensive recycling of paper, cardboard and other materials. The Laboratory has received national awards for these activities.

Current monitoring data demonstrates that LLNL complies with all environmental laws and regulations governing emission and discharge of materials to the environment. Laboratory scientists determine LLNL's overall environmental impact by conducting extensive analysis of water, air and vegetation samples in accordance with LLNL, U.S. Department of Energy and regulatory agency requirements. Compliance with these requirements is documented in the Site Annual Environmental Report. If you do not have access to the environmental information web site, please let me know if you would like a compact disc or print copy of the Executive Summary or the entire two-volume document for the most recent year.

Copies of current LLNL environmental documents are placed in the environmental repositories at the Livermore Public Library and the LLNL Discovery Center off Greenville Road north of East Avenue. Announcements of their availability and complete copies of most recent environmental reports are also available on our web site http://www-envirinfo.llnl.gov/. Some of the documents are available in paper copy upon request. Please call me at (925) 424-4026 if you

have a specific need or encounter any problems with access to the web-based information or the repositories.

The web site also carries the LLNL and regulatory agency documents regarding plutonium concentrations in Big Trees Park in Livermore. The issue is occasionally raised in local media. Over the past ten years or so, several in-depth investigations by the Laboratory and the regulatory agencies have found no health threat to the public from sewage sludge used as a soil amendment around specific trees planted in the park in the 1960s.

The sludge was also available to the public as a soil amendment and the Centers for Disease Control Agency for Toxic Substances and Disease Registry has determined it does not present a public health threat. The use had been approved at the time by the appropriate regulatory agency. All plutonium contamination found was below the U.S. Environmental Protection Agency's level of concern for residential soil, their most health-protective level. Most samples showed plutonium within the range found throughout the world due to fall-out from nuclear weapons tests conducted by many nations over the last five decades.

I hope this information responds to your need. Please contact me at (925) 424-4026 or via e-mail at heffner1@llnl.gov with any further questions. And please send me your name and new address in Livermore if you would like to be added to our mailing list for Laboratory environmental news and notices.

Sincerely yours,

Herbert F. Heffner, Manager Environmental Community Relations

HFH/klp: (05-27)